

MATERIAL SAFETY DATA SHEET



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Gaseous Argon

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Emergency Phone Numbers: (504) 673-8831; CHEMTREC (800) 424-9300

SECTION I--PRODUCT IDENTIFICATION

CHEMICAL NAME: Argon
COMMON NAME AND SYNONYMS: Gaseous Argon, Argon
CHEMICAL FAMILY: Rare Gas FORMULA: Ar

SECTION II--HAZARDOUS INGREDIENTS

MATERIAL	VOLUME %	CAS NO.	1985-6 ACGIH TLV UNITS
Argon	99.9	7440-37-1	Simple Asphyxiant

SECTION III--PHYSICAL DATA

BOILING POINT (°F.)	-302.6°F	SPECIFIC GRAVITY (H ₂ O=1) (@-302.6°F)	1.39
VAPOR PRESSURE (mmHg.) (@-302.6°F)	760	% VOLATILE BY VOLUME	100
VAPOR DENSITY (AIR=1)	1.38	EVAPORATION RATE	
SOLUBILITY IN WATER	Slight	(BUTYL ACETATE=1)	N/A
APPEARANCE AND ODOR	Colorless, odorless gas		

SECTION IV--FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED)	N/A	FLAMMABLE LIMITS	<u>LEL</u> N/A	<u>UEL</u> N/A
EXTINGUISHING MEDIA:	Non-Flammable Inert Gas			
SPECIAL FIRE FIGHTING PROCEDURES:	Neither burns nor supports combustion			
UNUSUAL FIRE AND EXPLOSION HAZARDS:	Fire exposed cylinders could rupture violently if cylinder valve safety devices should fail to relieve pressure.			

SECTION V--HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: Argon is a simple asphyxiant, accordingly should have an 18% by volume minimum O₂ content in air at 1 atmosphere pressure.

EFFECTS OF OVEREXPOSURE: Dizziness, unconsciousness, death

EMERGENCY AND FIRST AID PROCEDURES: If inhaled remove to fresh air in safe ventilated area. Obtain prompt medical attention. Administer air or oxygen, give cardiopulmonary resuscitation.

ROUTE(S) OF ENTRY: INHALATION? Yes SKIN? No INGESTION? No
CARCINOGENICITY: NTP? No IARC MONOGRAPHS? No OSHA? No

SECTION VI--REACTIVITY DATA

STABILITY: UNSTABLE () STABLE (X)
CONDITIONS TO AVOID: N/A
INCOMPATIBILITY (MATERIALS TO AVOID): None
HAZARDOUS DECOMPOSITION PRODUCTS: None
HAZARDOUS POLYMERIZATION: MAY OCCUR () WON'T OCCUR (X)
CONDITIONS TO AVOID: N/A

SECTION VII--SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
Maintain adequate ventilation to avoid deficiency (less than 18%) of oxygen in breathing atmosphere. Emergency employees should wear self contained or positive pressure air breathing masks. Evacuate all personnel from the affected area. Argon can cause rapid suffocation.

WASTE DISPOSAL METHOD: None required - Slowly diffuse into atmosphere in ventilated remote area.

SECTION VIII--SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Use positive pressure air supplied or self-contained masks.

VENTILATION: LOCAL EXHAUST (X) To prevent O₂ concentration in air from being reduced to below 18% by volume.
MECHANICAL (GENERAL) ()

PROTECTIVE GLOVES: Cotton or leather. EYE PROTECTION: Safety goggles or glasses

OTHER PROTECTIVE EQUIPMENT: Safety shoes
Low oxygen (less than 18%) alarm where necessary

SECTION IX--SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:
Protect containers from physical damage. Use only DOT or ASME coded storage containers. Follow normal compressed gas storage practices. Store in cold, dry, and well ventilated areas. High pressure gas can cause rapid suffocation.

OTHER PRECAUTIONS:

Refer to CGA Bulletin SB-2 and pamphlets P-9 and P-14.

SB-2 -- "Oxygen Deficient Atmosphere"

P-9 -- "The Inert Gases Argon, Nitrogen, and Helium"

P-14 -- "Accident Prevention in Oxygen Rich and Oxygen Deficient Atmospheres"

Use a check valve or trap in the argon cylinder discharge line to prevent hazardous backflow. Cylinders must not be recharged except by or with consent of Liquid Carbonic.

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